

WEST



Generate Collection

L21: Entry 1 of 6

File: USPT

Apr 10, 2001

DOCUMENT-IDENTIFIER: US 6214540 B1

TITLE: Chemokines that inhibit immunodeficiency virus infection and methods based thereon

DEPR:

High throughput screening for chemokine, derivative or analogue receptor binding may be performed by methods known in the art, including but not limited to flow cytometry. According to this method, cells that express human CD4 and one of the HIV co-receptors (e.g., CC CKR-5, CxC CKR4, etc.) are treated with biotinylated chemokine, derivative, or analogue and cell surface binding to each cell type is detected with an avidin FITC conjugate. Alternatively, other methods for labeling or detecting binding of the chemokine, derivative or analogue, such as antibodies, may be used. The same flow cytometry system may be used to assess receptor binding specificity, by testing for competitive binding between the chemokine, derivative or analogue and known ligands.

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L21: Entry 5 of 6

File: USPT

Nov 10, 1998

DOCUMENT-IDENTIFIER: US 5834419 A

TITLE: Chemokine binding protein and methods of use therefor

DRPR:

FIG. 9 shows the binding of human RANTES chemokine to partially-purified CBP-I. Silver stain analysis revealed a cross-linked binding complex (CBP-I+Rantes) of approximately 47 kD when CBP-I is incubated with biotinylated Rantes (Lanes 2-6), and this binding can be titrated out by decreasing amounts of the unlabelled chemokine ligand.

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 Generate Collection

L21: Entry 4 of 6

File: USPT

Nov 30, 1999

DOCUMENT-IDENTIFIER: US 5994519 A

TITLE: Labelling and selection of molecules

DEPR:

1.times.10.sup.5 CD4.sup.+ lymphocytes were incubated with 2.times.10.sup.12 phage prepared from the 1.4.times.10.sup.10 scFv phage display library in either the presence or absence of biotinylated MIP-1.alpha. (R and D Systems) at a final concentration of 375 nM. The final volume for each selection was made up .sup.40 .mu.l with PBS containing 2% marvel (MPBS). Selections were incubated for 14 hr at 4.degree. C. Cells were pelleted by centrifugation at 600 g for 3 min, and washed in 1 ml MPBS. A total of three washes were carried out. 100 .mu.l of streptavidin-HRP was added at a dilution of 1:1000 in MPBS. This was incubated for 2 hr, then washed as before. Biotin tyramine was then added (as Example 2, part bi) in 100 .mu.l of 150 mM NaCl/50 MM TrisHCl pH 7.4 containing 3% H.sub.2 O.sub.2 and incubated for 10 min at room temperature. Cells were washed and resuspended in 100 .mu.l TE containing 0.5% triton. Biotinylated phage were captured on 10 .mu.l of MPBS-blocked streptavidin-coated magnetic beads (Dynal). The beads were washed three times in 1 ml PBS/0.1% Tween 20 (PBST), then resuspended in 100 .mu.l of PBS. Phage eluate before and after streptavidin capture were titered by infection of an exponentially growing culture of E coli TG1 at 37.degree. C. for 1 hr. The numbers of phage recovered from the various selection procedures are shown below.

DEPR:

The greatest recovery of biotinylated phage was observed from CD4.sup.+ lymphocytes incubated with both the biotinylated MIP-1.alpha. and biotin tyramine. Omission of either the biotinylated ligand or the biotin tyramine resulted in an approximately 5 to 6-fold drop in the percentage of phage recovered from the eluate. These results suggest the biotinylated MIP-1.alpha. is capable of binding the CD4.sup.+ cells in the presence of the phage library and directing biotinylation of phage binding around it in the presence of HRP and hydrogen peroxide.

DEPR:

1.times.10.sup.5 CD4.sup.+ lymphocytes were prepared as described in Example 9 part a and incubated with 2.times.10.sup.12 phage prepared from the 1.4.times.10.sup.10 scFv phage display library in either the presence or absence of biotinylated MIP-1.alpha. (R and D Systems) at a final concentration of 375 nM. The final volume for each selection was made up 40 .mu.l with PBS containing 2% marvel (MPBS). Selections were incubated for 14 hr at 4.degree. C. Cells were pelleted by centrifugation at 600 g for 3 min, and washed in 1 ml MPBS. A total of three washes were carried out. Cells were then incubated in the dark for 30 min with 500 mM streptavidin-conjugated SAND. Cells were washed as before, then exposed to 5 flashes of light from a standard flashgun. Cells were pelleted and resuspended in 100 .mu.l TE containing 0.5% triton.

DEPR:

Phage were only recovered from the final eluate when streptavidin-SAND was included in the selection scheme. In the absence of this no background phage were recovered. These results demonstrate the ability of biotinylated MIP-1alpha and a light activatable streptavidin molecule to specifically cross-link streptavidin to phage binding around the site of MIP-1.alpha. binding.

DEPR:

6 scFv's were purified using nickel agarose metal affinity chromatography (Qiagen). 1.times.10.sup.5 CD4 cells were preincubated with the purified CD4+-binding scFv's, or with an irrelevant control scFv for 1 hr at room temperature in PBS containing 0.1% BSA in a total volume of 100 .mu.l. Approximately 5-10 .mu.g of scFv was used per sample Cells were pelleted at 4000 rpm in a minifuge and washed once in 1 ml PBS. Biotinylated MIP-1.alpha. (R and D Systems) was made up according to manufacturer's instructions 5 .mu.l (equivalent to 5 ng) added to the cells in 100 .mu.l MPBS and incubated at room temperature for 1 hr. Cells were washed as before. 100 .mu.l of streptavidin-FITC (Sigma) at a dilution of 1:100 in MPBS was added and incubated for 30 min at room temperature, and cells were washed as before. Fluorescence was detected using a Coulter Epics-XL flow cytometer. MIP-1 α gave significant shift in the fluorescence of the cells when no scFv, or control scFv was added to the cells. In the presence of scFv from the selected clones MIP-1 α . binding to the cells was significantly inhibited. Inhibition varied from clone to clone.

DEPR:

Example 9 described the selection of phage antibodies which bind to a chemokine receptor. Phage selections were carried out on CD4+ cells using biotinylated MIP-1 α ., followed by streptavidin-HRP to guide the selection. 30/95 phage selected in the presence of the biotin tyramine and MIP-1 α . recognised CD4+ lymphocytes. 13 of these clones were found to be positive for the CC-CKR5 chemokine receptor for which MIP-1 α . is a ligand, leaving 17 clones which bind to CD4+ cells, but to another antigen to be discerned (Example 9 part c). These clones may recognise antigens which are normally found in close proximity to MIP-1 α . receptors, or are MIP-1 α . receptors other than CC-CKR5 (CC-CKR1 and CC-CKR4 both bind to MIP-1 α .). Identification of the antigens to some of these CD4+-binding clones allows examination of protein-protein interactions on the cell surface, and exemplifies the potential of biotin tyramine selection as a tool for discovering novel protein-protein interactions.

DEPR:

Clone CD4E1 has been selected by virtue of the fact that it binds to an antigen found close to MIP-1 α binding sites on CD4+ cell surfaces. It should therefore be possible to use biotinylated MIP-1 α . bound to streptavidin-HRP to catalyse biotin tyramine deposition onto CD4E1 phage bound to the CD4+ cell surface to demonstrate that the CD4E1 antigen is normally found in close association with MIP-1 α . receptors. This was tested by incubating cells with biotinylated MIP-1 α ., streptavidin-HRP and CD4E1 phage, treating with biotin tyramine and then recovering the biotinylated phage and titring. Recovery of phage using this system was compared to recovery when phage which bind at a site on the CD4+ cell surface which is remote from the MIP-1 α . binding sites were incubated with the cells, or when a biotinylated ligand (biotinylated VCAM) which binds at another remote site on the CD4+ cell surface was used in conjunction with CD4E1 phage.

DEPR:

CD4+ cells were purified as described in Example 9. CD4E1 phage, or phage from a CD4+ binding clone (CLA4) were prepared as described in Example 12. 1.times.10.sup.6 cells were incubated for 1 hr with 5 ng of biotinylated MIP-1 α ., or 5 ng of biotinylated VCAM in a total volume of 100 .beta.1 PBS/BSA. Streptavidin-HRP (1:1000 dilution in PBS/BSA) was then added to the cells and incubated for 30 min. Cells were washed in PBS, and then 10.sup.11 phage added in PBS/BSA and allowed to bind to the cells for 1 hr at room temperature. Cells were washed in PBS and then treated with biotin tyramine as described before. Cells were washed in PBS and then lysed in PBS containing 0.1% Tween and biotinylated phage were captured on streptavidin-coated. Beads were washed three times in PBST and three times in PBS, then infected directly into an exponentially growing culture of E coli TG1.

WEST **Generate Collection**

L24: Entry 2 of 340

File: USPT

Oct 16, 2001

DOCUMENT-IDENTIFIER: US 6303325 B1
TITLE: Method for detecting analytes

APD:
19980529

BSPR:

In certain embodiments of the methods, the first binding agent and the second binding agent are the same. In these embodiments the activator can be a multivalent molecule. In preferred embodiments where the first and second binding agents comprise biotin, the activator comprises avidin, streptavidin or anti-biotin antibody. Preferably, the number of binding sites on the activator, e.g., avidin or streptavidin, added is less than or equal to the total equivalents of the first and second binding agent, e.g., biotin, bound to the support and the antigen. More preferably, the number of binding sites on the activator is one-half the total equivalents of biotin comprising the first and second binding agents.

BSPR:

If the second binding agent is the same as the first binding agent, the activator must be able to bind both the first and second binding agents. That is, the activator must be at least bivalent, and preferably multivalent. Examples of multivalent molecules included, but are not limited to, streptavidin and anti-biotin antibodies IgG and IgM. One of ordinary skill in the art can readily select appropriate multivalent molecules for use as activators based upon the teachings herein. For example, if the first and second binding agents are biotin, the activator is preferably a molecule such as streptavidin, anti-biotin IgG or IgM. In another example, in which the first and second binding agents are each a hapten (e.g., fluorescein, digoxigenin, dinitrophenol or others), the activator may comprise a multivalent anti-hapten antibody, preferably IgM. If the first and second binding agents are carbohydrates, the activator may be a lectin, capable of binding both binding agents. When the first and second binding agents are receptors, the activator is preferably a multimeric synthetic peptide. See e.g., Wallace, A., et al., Pept. Res., 7(1), 27-31 (1994). If the activator is not naturally multivalent, e.g., streptavidin, a multivalent molecule can readily be prepared by one of ordinary skill in the art. See e.g., Holliger, WO 9413804 A1 and Libyh, M., et al., Fr. Blood, (1997), 90(10), 3978-3983. For example, if the first and second binding agents are folate binding protein, a folate-dextran conjugate can be prepared comprising multiple copies of folate bound to dextran. This conjugate is capable of binding the folate binding protein of both the first and second binding agents.

BSPR:

In these assays, an activator is then added that binds the first binding agent in the complex and the second binding agent. As described above, the activator can have many forms, depending on the nature of the first and second binding agents. In the above example, where both the first and second binding agents comprises biotin, the activator is preferably a multivalent compound that can bind biotin at more than one site. Preferred activators include avidin, streptavidin, anti-biotin antibody. The activator binds the first binding agent bound to the antigen, e.g., biotin, that has competed with the sample antigen for binding with the specific binder, e.g., antibody, and the second binding agent bound to the solid surface. Thus, the reaction mixture does not need to be

transferred to another well or test tube prior to being coupled to the solid support. The methods of the present invention enable the above reaction to occur in one tube or reaction well.

CLPR:

4. The method according to claim 3, wherein the multivalent molecule is selected from the group consisting of avidin, streptavidin, anti-biotin IgG, antibiotin IgM, lectin, a multimeric synthetic peptide, and folate dextran conjugate.

CLPR:

7. The method according to claim 1, wherein the first and second binding agents comprise biotin and the activator comprises avidin, streptavidin or anti-biotin antibody.

CLPR:

28. The method according to claim 27, wherein the multivalent molecule is selected from the group consisting of avidin, streptavidin, anti-biotin IgG, antibiotin IgM, lectin, a multimeric synthetic peptide, and folate dextran conjugate.

CLPR:

32. The method according to claim 25, wherein the first and second binding agents comprise biotin and the activator comprises avidin, streptavidin or anti-biotin antibody.

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L20: Entry 13 of 33

File: USPT

Oct 20, 1998

DOCUMENT-IDENTIFIER: US 5824782 A
TITLE: Immunoconjugates II

APD:
19950915

BSPR:

The present invention relates to new fusion proteins which consist of a tumor-associated targeting element, preferably a monoclonal antibody or a fragment thereof, recognizing and specific for a molecule which is preferentially expressed on human tumor cells such as the human epidermal growth factor receptor (EGFR), and a biologically active ligand selected from the group of chemokine proteins, preferably from the C-X-C family. The resulting fusion proteins may be used to deliver the biologically active ligand to a specific target cell or tissue. The new immunoconjugates can be used in tumor therapy and diagnostics.

BSPR:

The invention relates to fusion proteins which combine part of a monoclonal antibody, minimally the antigen-recognition site, or a complete monoclonal antibody recognizing and specific for an epitope of EGFR, with a biologically active ligand selected from the group of chemokines, preferably from the C-X-C family, especially IL-8. The constructs encoding these fusion proteins are generated by recombinant DNA technology methods. The fusion proteins contain the variable region of the antibody heavy chain and the CH1 domain of the constant region (CH1-conjugates, Fab-fragment) and the appropriate light chain, or the variable region of the antibody heavy chain and the CH1 and CH2 domain of the constant region, or the variable region of the antibody heavy chain and the CH1, CH2 and CH3 domain of the constant region, fused to the biologically active ligand in each case. By co-expression with the appropriate light chain, a fusion protein can be generated which targets antigen-bearing cells and delivers an active ligand to a specific site in the body.

BSPR:

The DNA encoding the immunoconjugates according to the invention may comprise optionally a restriction site between the antibody (or fragment thereof) and the chemokine protein which makes it possible to introduce, for example, a specific linker peptide in order to ensure an optimal binding of the conjugate to the target epitope. Suitable linker peptides and methods to introduce them are well known in the art and described below. According to the invention a restriction site is selected which is unique in the particular DNA construct. Preferred restriction sites are Ncol and Bcll.

DEPR:

This invention provides a fusion protein consisting of a monoclonal antibody or fragment thereof as a targeting element and a chemokine, e.g., IL-8, as an effector molecule with chemotactic and activating properties.

DEPR:

The Mab 425-CH1/IL-8 (Fab/IL-8) fusion protein described herein provides a molecule according to the invention that combines the targeting property of an antibody specific for the tumor-associated EGF-receptor with the chemotactic and activating properties of IL-8. Since IL-8 is not species specific (Baggiolini et al., J. Clin. Invest. 84:1045-1049, 1989), the anti-tumor potential of the

fusion protein can be further assessed in a variety of suitable in vivo models, such as nude mice implanted with EGF-receptor-positive tumor cells, or in tumor-bearing scid mice reconstituted with human effector cells.

- ▶ All MeSH Categories
 - ▶ Chemicals and Drugs (MeSH Category)
 - ▶ Immunologic and Biological Factors
 - ▶ Biological Factors
 - ▶ Chemotactic Factors
 - ▽ Chemokines
 - ▶ Chemokines, C
 - ▶ Chemokines, CC
 - ▶ Chemokines, CX3C
 - ▶ Chemokines, CXC
 - ▶ Interleukin-8
 - ▶ Macrophage Inflammatory Proteins
 - ▶ Monocyte-Chemoattractant Proteins
 - ▶ Platelet Factor 4
 - ▶ RANTES
 - ▶ beta-Thromboglobulin
 - ▶ Chemotactic Factors, Eosinophil
 - ▶ Chemotactic Factors, Macrophage
 - ▶ N-Formylmethionine Leucyl-Phenylalanine

MeSH Tree 2

- ▶ All MeSH Categories
 - ▶ Chemicals and Drugs (MeSH Category)
 - ▶ Anti-Inflammatory Agents, Antirheumatic Agents, and Inflammation Mediators
 - ▶ Inflammation Mediators
 - ▶ Autacoids
 - ▽ Chemokines
 - ▶ Chemokines, C
 - ▶ Chemokines, CC
 - ▶ Chemokines, CX3C
 - ▶ Chemokines, CXC
 - ▶ Interleukin-8
 - ▶ Macrophage Inflammatory Proteins
 - ▶ Monocyte Chemoattractant Proteins
 - ▶ Platelet Factor 4
 - ▶ RANTES
 - ▶ beta-Thromboglobulin
 - ▶ Prostaglandins, Synthetic

MeSH Tree 3

- ▶ All MeSH Categories
 - ▶ Chemicals and Drugs (MeSH Category)
 - ▶ Immunologic and Biological Factors
 - ▶ Immunologic Factors
 - ▶ Cytokines
 - ▶ Autocrine Motility Factor
 - ▽ Chemokines
 - ▶ Chemokines, C
 - ▶ Chemokines, CC
 - ▶ Chemokines, CX3C
 - ▶ Chemokines, CXC
 - ▶ Interleukin-8
 - ▶ Macrophage Inflammatory Proteins
 - ▶ Monocyte Chemoattractant Proteins
 - ▶ Platelet Factor 4
 - ▶ RANTES
 - ▶ beta-Thromboglobulin
 - ▶ Growth Substances
 - ▶ Interferons
 - ▶ Lymphokines
 - ▶ Monokines

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L12: Entry 1 of 147

File: USPT

Oct 23, 2001

DOCUMENT-IDENTIFIER: US 6307024 B1
TITLE: Cytokine zalpha1 Ligand

DEPR:

The secretion trap was performed as follows: Media was rinsed off cells with PBS and then fixed for 15 minutes with 1.8% Formaldehyde in PBS. Cells were then washed with TNT (0.1M Tris-HCl, 0.15M NaCl, and 0.05% Tween-20 in H₂O), and permeated with 0.1% Triton-X in PBS for 15 minutes, and again washed with TNT. Cells were blocked for 1 hour with TNB (0.1M Trns-HCl, 0.15M NaCl and 0.5% Blocking Reagent (NEN Renaissance TSA-Direct Kit) in H₂O), and washed again with TNT. If using the biotinylated protein, the cells were blocked for 15 minute incubations with Avidin and then Biotin (Vector Labs) washing in-between with TNT. Depending on which soluble receptor was used, the cells were incubated for 1 hour with: (A) 1-3 .mu.g/ml zalpha1 soluble receptor zalpha1-Fc4 fusion protein (Example 10); (B) 3 .mu.g/ml zalpha1 soluble receptor C-terminal FLAG tagged, zalpha1 CFLG (Example 10); (C) 3 .mu.g/ml zalpha1 soluble receptor C-terminal GluGlu tagged, zalpha1 CEE (Example 10); or (D) 3 .mu.g/ml biotinylated zalpha1 soluble receptor zalpha1 CEE in TNB. Cells were then washed with TNT. Depending on which soluble receptor was used, cells were incubated for another hour with: (A) 1:200 diluted goat-anti-human Ig-HRP (Fe specific); (B) 1:1000 diluted M2-HRP; (C) 1:1000 diluted anti-GluGlu antibody-HRP; or (D) 1:300 diluted streptavidin-HRP (NEN kit) in TNB. Again cells were washed with TNT.

WEST

Generate Collection

L15: Entry 1 of 76

File: USPT

Oct 23, 2001

DOCUMENT-IDENTIFIER: US 6306393 B1

TITLE: Immunotherapy of B-cell malignancies using anti-CD22 antibodies

BSPR:

It is a further object of this invention to provide multimodal methods for treatment of B-cell malignancies in which low doses of anti-CD22 and/or anti-CD19 antibodies are supplemented with the administration of a therapeutic protein, such as an immunoconjugate or antibody fusion protein, or by a chemotherapeutic regimen.

CLPR:

16. The method of claim 5, further comprising administering a therapeutic protein or chemotherapeutic treatment, wherein said therapeutic protein is selected from the group consisting of antibody, immunoconjugate, antibody-immunomodulator fusion protein and antibody-toxin fusion protein.



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Chemokines

family of 8-10 KD cytokines; chemoattract leukocytes.

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With Subheadings:

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|---|---|
| <input type="checkbox"/> administration & dosage
<input type="checkbox"/> adverse effects
<input type="checkbox"/> agonists
<input type="checkbox"/> analysis
<input type="checkbox"/> antagonists & inhibitors
<input type="checkbox"/> biosynthesis
<input type="checkbox"/> blood
<input type="checkbox"/> cerebrospinal fluid
<input type="checkbox"/> chemical synthesis
<input type="checkbox"/> chemistry
<input type="checkbox"/> classification
<input type="checkbox"/> contraindications
<input type="checkbox"/> deficiency
<input type="checkbox"/> diagnostic use
<input type="checkbox"/> economics
<input type="checkbox"/> genetics | <input type="checkbox"/> history
<input type="checkbox"/> immunology
<input type="checkbox"/> isolation & purification
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<input type="checkbox"/> physiology
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<input type="checkbox"/> supply & distribution
<input type="checkbox"/> therapeutic use
<input type="checkbox"/> toxicity
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MeSH Tree 1

WEST **Generate Collection**

L28: Entry 25 of 41

File: DWPI

Sep 7, 1999

DERWENT-ACC-NO: 1998-130615

DERWENT-WEEK: 199943

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TITLE: New nucleic acid encoding Kaposi's sarcoma associated herpes virus proteins - useful for, e.g. detecting levels of HHV8 in, and preparation of vaccines for treatment of, HIV patients

INVENTOR: BOHENZKY, R A; CHANG, Y ; EDELMAN, I S ; MOORE, P S ; RUSSO, J J

PATENT-ASSIGNEE: UNIV COLUMBIA NEW YORK (UYCO)

PRIORITY-DATA: 1996US-0757669 (November 29, 1996), 1996US-0686243 (July 25, 1996), 1996US-0686349 (July 25, 1996), 1996US-0686350 (July 25, 1996), 1996US-0687253 (July 25, 1996), 1996US-0708678 (September 5, 1996), 1996US-0728323 (October 10, 1996), 1996US-0747887 (November 13, 1996), 1996US-0748640 (November 13, 1996)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
US 5948676 A	September 7, 1999		000	C12N015/00
WO 9804576 A1	February 5, 1998	E	230	C07H021/04
AU 9740478 A	February 20, 1998		000	C07H021/04
US 5831064 A	November 3, 1998		000	C07H021/04
US 5853734 A	December 29, 1998		000	A61K034/12
US 5854398 A	December 29, 1998		000	C07K016/08
US 5854418 A	December 29, 1998		000	A61K039/245
US 5859225 A	January 12, 1999		000	C07H021/04
US 5861500 A	January 19, 1999		000	A61K039/245
US 5863787 A	January 26, 1999		000	C07H021/04
EP 934333 A1	August 11, 1999	E	000	C07H021/04

DESIGNATED-STATES: AU CA JP MX AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
US 5948676A	October 10, 1996	1996US-0728323	
WO 9804576A1	July 22, 1997	1997WO-US13346	
AU 9740478A	July 22, 1997	1997AU-0040478	
AU 9740478A		WO 9804576	Based on
US 5831064A	July 25, 1996	1996US-0686350	
US 5853734A	November 13, 1996	1996US-0747887	
US 5854398A	July 25, 1996	1996US-0686349	CIP of
US 5854398A	November 13, 1996	1996US-0748640	
US 5854418A	July 25, 1996	1996US-0687253	
US 5859225A	September 5, 1996	1996US-0708678	
US 5861500A	July 25, 1996	1996US-0686349	
US 5863787A	July 25, 1996	1996US-0686243	
EP 934333A1	July 22, 1997	1997EP-0938064	
EP 934333A1	July 22, 1997	1997WO-US13346	
EP 934333A1		WO 9804576	Based on

INT-CL (IPC) : A61K 34/12; A61K 39/245; C07H 21/04; C07K 14/03; C07K 16/08; C12N 1/21; C12N 7/00; C12N 7/02; C12N 15/00; C12N 15/09; C12N 15/10; C12N 15/38; C12P 19/34; C12Q 1/68; G01N 33/50

RELATED-ACC-NO: 1997-393610

ABSTRACTED-PUB-NO: US 5831064A

BASIC-ABSTRACT:

New isolated nucleic acid (I) encoding a Kaposi's-sarcoma associated herpes virus (HHV8) polypeptide is selected from: (a) viral macrophage inflammatory protein (vMIP) II; (b) viral interleukin-6 (vIL-6); (c) viral interferon regulatory factor 1; (d) complement-binding protein; glycoproteins B, M or L; (d) capsid early protein IV encoded by ORF65, and (e) immediate early protein encoded by ORF73. Also claimed are: (1) replicable vectors containing (I); (2) host cells containing these vectors; (3) a plasmid, cosmid, lambda -phage or YAC comprising (I); (4) nucleic acid (Ia) of at least 14 nt that hybridise specifically with (I); (5) an isolated polypeptide (II) encoded by (I); (6) a fusion protein comprising (II) linked to beta -galactosidase; (7) an antibody (Ab) specific for (II); (8) antisense molecules (Ib) and triplex-forming molecules (Ic) that specifically hybridise with (I); (9) a host cell which expresses (II); (10) a vaccine comprising (II) and a carrier, and (11) a transgenic non-human animal containing (I) introduced at the embryonic stage.

USE - Labelled (Ia), Ab and (II) are useful for detecting HHV8, specifically for diagnosis of Kaposi sarcoma, in body fluids (especially serum) or tissue samples (claimed). HHV8 infections can be treated with (Ib), (Ic) or agents that bind specifically to (II) (claimed). Ab may be used for prophylaxis or treatment of HHV8 infection, while (II) can be used in protective vaccines (which may alternatively contain attenuated or killed HHV8 or vectors encoding (II)) (all claimed). Ab may also be used to differentiate between lymphomas, and HHV8 may be implicated in many other lymphoproliferative diseases such as lymphomas, leukaemia, splenomegaly and mycosis fungoides. Cells and animals containing (I) are useful for drug screening. HHV8-derived peptides can be used as targets for antiviral drugs, e.g. dihydrofolate reductase gene can be inhibited with methotrexate. These can also be used to determine the immune status of a patient infected with HIV. HHV8 derived protein viral MIP III may be used as an antiinflammatory agent for, e.g. treating rheumatoid arthritis. Therapeutic agents are administered orally, by injection at doses, e.g. for Ab or immunotoxins at 0.01-10 mg/kg or for vaccines at 0.1-100 especially 15-45 mu g protein.

ABSTRACTED-PUB-NO: US 5853734A

EQUIVALENT-ABSTRACTS:

New isolated nucleic acid (I) encoding a Kaposi's-sarcoma associated herpes virus (HHV8) polypeptide is selected from: (a) viral macrophage inflammatory protein (vMIP) II; (b) viral interleukin-6 (vIL-6); (c) viral interferon regulatory factor 1; (d) complement-binding protein; glycoproteins B, M or L; (d) capsid early protein IV encoded by ORF65, and (e) immediate early protein encoded by ORF73. Also claimed are: (1) replicable vectors containing (I); (2) host cells containing these vectors; (3) a plasmid, cosmid, lambda -phage or YAC comprising (I); (4) nucleic acid (Ia) of at least 14 nt that hybridise specifically with (I); (5) an isolated polypeptide (II) encoded by (I); (6) a fusion protein comprising (II) linked to beta -galactosidase; (7) an antibody (Ab) specific for (II); (8) antisense molecules (Ib) and triplex-forming molecules (Ic) that specifically hybridise with (I); (9) a host cell which expresses (II); (10) a vaccine comprising (II) and a carrier, and (11) a transgenic non-human animal containing (I) introduced at the embryonic stage.

USE - Labelled (Ia), Ab and (II) are useful for detecting HHV8, specifically for diagnosis of Kaposi sarcoma, in body fluids (especially serum) or tissue samples (claimed). HHV8 infections can be treated with (Ib), (Ic) or agents that bind specifically to (II) (claimed). Ab may be used for prophylaxis or treatment of HHV8 infection, while (II) can be used in protective vaccines (which may alternatively contain attenuated or killed HHV8 or vectors encoding (II)) (all claimed). Ab may also be used to differentiate between lymphomas, and HHV8 may be implicated in many other lymphoproliferative diseases such as lymphomas, leukaemia, splenomegaly and mycosis fungoides. Cells and animals containing (I) are useful for drug screening. HHV8-derived peptides can be used as targets for antiviral drugs, e.g. dihydrofolate reductase gene can be inhibited with methotrexate. These can also be used to determine the immune status of a patient infected with HIV. HHV8 derived protein viral MIP III may be used as an antiinflammatory agent for, e.g. treating rheumatoid arthritis. Therapeutic agents are administered orally, by injection at doses, e.g. for Ab or immunotoxins at 0.01-10 mg/kg or for vaccines at 0.1-100 especially 15-45 mu g protein.

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immunotoxins at 0.01-10 mg/kg or for vaccines at 0.1-100 especially 15-45 mu g protein.

US 5854398A

New isolated nucleic acid (I) encoding a Kaposi's-sarcoma associated herpes virus (HHV8) polypeptide is selected from: (a) viral macrophage inflammatory protein (vMIP) II; (b) viral interleukin-6 (vIL-6); (c) viral interferon regulatory factor 1; (d) complement-binding protein; glycoproteins B, M or L; (d) capsid early protein IV encoded by ORF65, and (e) immediate early protein encoded by ORF73. Also claimed are: (1) replicable vectors containing (I); (2) host cells containing these vectors; (3) a plasmid, cosmid, lambda -phage or YAC comprising (I); (4) nucleic acid (Ia) of at least 14 nt that hybridise specifically with (I); (5) an isolated polypeptide (II) encoded by (I); (6) a fusion protein comprising (II) linked to beta -galactosidase; (7) an antibody (Ab) specific for (II); (8) antisense molecules (Ib) and triplex-forming molecules (Ic) that specifically hybridise with (I); (9) a host cell which expresses (II); (10) a vaccine comprising (II) and a carrier, and (11) a transgenic non-human animal containing (I) introduced at the embryonic stage.

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US 5854418A

New isolated nucleic acid (I) encoding a Kaposi's-sarcoma associated herpes virus (HHV8) polypeptide is selected from: (a) viral macrophage inflammatory protein (vMIP) II; (b) viral interleukin-6 (vIL-6); (c) viral interferon regulatory factor 1; (d) complement-binding protein; glycoproteins B, M or L; (d) capsid early protein IV encoded by ORF65, and (e) immediate early protein encoded by ORF73. Also claimed are: (1) replicable vectors containing (I); (2) host cells containing these vectors; (3) a plasmid, cosmid, lambda -phage or YAC comprising (I); (4) nucleic acid (Ia) of at least 14 nt that hybridise specifically with (I); (5) an isolated polypeptide (II) encoded by (I); (6) a fusion protein comprising (II) linked to beta -galactosidase; (7) an antibody (Ab) specific for (II); (8) antisense molecules (Ib) and triplex-forming molecules (Ic) that specifically hybridise with (I); (9) a host cell which expresses (II); (10) a vaccine comprising (II) and a carrier, and (11) a transgenic non-human animal containing (I) introduced at the embryonic stage.

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antiviral drugs, e.g. dihydrofolate reductase gene can be inhibited with methotrexate. These can also be used to determine the immune status of a patient infected with HIV. HHV8 derived protein viral MIP III may be used as an antiinflammatory agent for, e.g. treating rheumatoid arthritis. Therapeutic agents are administered orally, by injection at doses, e.g. for Ab or immunotoxins at 0.01-10 mg/kg or for vaccines at 0.1-100 especially 15-45 mu g protein.

US 5859225A

New isolated nucleic acid (I) encoding a Kaposi's-sarcoma associated herpes virus (HHV8) polypeptide is selected from: (a) viral macrophage inflammatory protein (vMIP) II; (b) viral interleukin-6 (vIL-6); (c) viral interferon regulatory factor 1; (d) complement-binding protein; glycoproteins B, M or L; (d) capsid early protein IV encoded by ORF65, and (e) immediate early protein encoded by ORF73. Also claimed are: (1) replicable vectors containing (I); (2) host cells containing these vectors; (3) a plasmid, cosmid, lambda -phage or YAC comprising (I); (4) nucleic acid (Ia) of at least 14 nt that hybridise specifically with (I); (5) an isolated polypeptide (II) encoded by (I); (6) a fusion protein comprising (II) linked to beta -galactosidase; (7) an antibody (Ab) specific for (II); (8) antisense molecules (Ib) and triplex-forming molecules (Ic) that specifically hybridise with (I); (9) a host cell which expresses (II); (10) a vaccine comprising (II) and a carrier, and (11) a transgenic non-human animal containing (I) introduced at the embryonic stage.

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US 5861500A

New isolated nucleic acid (I) encoding a Kaposi's-sarcoma associated herpes virus (HHV8) polypeptide is selected from: (a) viral macrophage inflammatory protein (vMIP) II; (b) viral interleukin-6 (vIL-6); (c) viral interferon regulatory factor 1; (d) complement-binding protein; glycoproteins B, M or L; (d) capsid early protein IV encoded by ORF65, and (e) immediate early protein encoded by ORF73. Also claimed are: (1) replicable vectors containing (I); (2) host cells containing these vectors; (3) a plasmid, cosmid, lambda -phage or YAC comprising (I); (4) nucleic acid (Ia) of at least 14 nt that hybridise specifically with (I); (5) an isolated polypeptide (II) encoded by (I); (6) a fusion protein comprising (II) linked to beta -galactosidase; (7) an antibody (Ab) specific for (II); (8) antisense molecules (Ib) and triplex-forming molecules (Ic) that specifically hybridise with (I); (9) a host cell which expresses (II); (10) a vaccine comprising (II) and a carrier, and (11) a transgenic non-human animal containing (I) introduced at the embryonic stage.

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alternatively contain attenuated or killed HHV8 or vectors encoding (II)) (all claimed). Ab may also be used to differentiate between lymphomas, and HHV8 may be implicated in many other lymphoproliferative diseases such as lymphomas, leukaemia, splenomegaly and mycosis fungoides. Cells and animals containing (I) are useful for drug screening. HHV8-derived peptides can be used as targets for antiviral drugs, e.g. dihydrofolate reductase gene can be inhibited with methotrexate. These can also be used to determine the immune status of a patient infected with HIV. HHV8 derived protein viral MIP III may be used as an antiinflammatory agent for, e.g. treating rheumatoid arthritis. Therapeutic agents are administered orally, by injection at doses, e.g. for Ab or immunotoxins at 0.01-10 mg/kg or for vaccines at 0.1-100 especially 15-45 mu g protein.

US 5863787A

New isolated nucleic acid (I) encoding a Kaposi's-sarcoma associated herpes virus (HHV8) polypeptide is selected from: (a) viral macrophage inflammatory protein (vMIP) II; (b) viral interleukin-6 (vIL-6); (c) viral interferon regulatory factor 1; (d) complement-binding protein; glycoproteins B, M or L; (d) capsid early protein IV encoded by ORF65, and (e) immediate early protein encoded by ORF73. Also claimed are: (1) replicable vectors containing (I); (2) host cells containing these vectors; (3) a plasmid, cosmid, lambda -phage or YAC comprising (I); (4) nucleic acid (Ia) of at least 14 nt that hybridise specifically with (I); (5) an isolated polypeptide (II) encoded by (I); (6) a fusion protein comprising (II) linked to beta -galactosidase; (7) an antibody (Ab) specific for (II); (8) antisense molecules (Ib) and triplex-forming molecules (Ic) that specifically hybridise with (I); (9) a host cell which expresses (II); (10) a vaccine comprising (II) and a carrier, and (11) a transgenic non-human animal containing (I) introduced at the embryonic stage.

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US 5948676A

New isolated nucleic acid (I) encoding a Kaposi's-sarcoma associated herpes virus (HHV8) polypeptide is selected from: (a) viral macrophage inflammatory protein (vMIP) II; (b) viral interleukin-6 (vIL-6); (c) viral interferon regulatory factor 1; (d) complement-binding protein; glycoproteins B, M or L; (d) capsid early protein IV encoded by ORF65, and (e) immediate early protein encoded by ORF73. Also claimed are: (1) replicable vectors containing (I); (2) host cells containing these vectors; (3) a plasmid, cosmid, lambda -phage or YAC comprising (I); (4) nucleic acid (Ia) of at least 14 nt that hybridise specifically with (I); (5) an isolated polypeptide (II) encoded by (I); (6) a fusion protein comprising (II) linked to beta -galactosidase; (7) an antibody (Ab) specific for (II); (8) antisense molecules (Ib) and triplex-forming molecules (Ic) that specifically hybridise with (I); (9) a host cell which expresses (II); (10) a vaccine comprising (II) and a carrier, and (11) a transgenic non-human animal containing (I) introduced at the embryonic stage.

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WO 9804576A

CHOSEN-DRAWING: Dwg.6/9

DERWENT-CLASS: B04 D16

CPI-CODES: B04-B03C; B04-E02F; B04-E06; B04-E08; B04-F01; B04-G01; B04-N03; B04-N04; B04-P0100E; B04-P01E; B12-K04A; B14-A02; B14-C03; B14-C09B; B14-H01; B14-H01A; B14-S11; D05-H07; D05-H09; D05-H11; D05-H12A; D05-H12D1; D05-H12E; D05-H14A1; D05-H14B; D05-H16A; D05-H17A6; D05-H17C;

WEST[Help](#)[Logout](#)[Interrupt](#)[Main Menu](#)[Search Form](#)[Posting Counts](#)[Show S Numbers](#)[Edit S Numbers](#)[Preferences](#)**Search Results -****Terms****Documents**

l30 and ((beta adj2 galactosidase) with antibod\$3)

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Database:

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Derwent World Patents Index
IBM Technical Disclosure Bulletins

130 and ((beta adj2 galactosidase) with
antibod\$3)[Refine Search:](#)[Clear](#)**Search History****Today's Date: 10/25/2001**

<u>DB Name</u>	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u>
USPT	l30 and ((beta adj2 galactosidase) with antibod\$3)	0	L34
USPT	l30 and (beta adj2 galactosidase)	8	L33
USPT	l30 and anti adj2 galactosidase	0	L32
USPT	l30 and (anti-beta)	0	L31
USPT	5948676[pn] or 5831064[pn] or 5853734[pn] or 5854398[pn] or 5854418[pn] or 5859225[pn] or 5861500[pn] or 5863787[pn]	8	L30
JPAB,EPAB,DWPI	l27 and (antibod\$3 near complex\$2)	2	L29
JPAB,EPAB,DWPI	l27 and antibod\$3	41	L28
JPAB,EPAB,DWPI	l25 and (fusion adj (protein\$1 or peptide\$1 or polypeptide\$1) or conjugat\$2)	96	L27
JPAB,EPAB,DWPI	l25 near biotin\$6	2	L26
JPAB,EPAB,DWPI	chemokine or (interleukin adj 8) or (il-8) or il8 or (MIP\$2) or MIP or (macrophage inflammatory protein\$1) or (MCP\$2) or mcp or (macrophage adj chemoattractant) or pl4 or (platelet	3802	L25

	near factor near 4) or rantes or (beta near thromboglobulin) or (b near thromboglobulin)		
USPT	l23 and @ad<19990222	340	<u>L24</u>
USPT	anti-biotin	364	<u>L23</u>
USPT	anti"-biotin	364	<u>L22</u>
USPT	l17 near biotin\$6	6	<u>L21</u>
USPT	l19 and @ad<19990222	33	<u>L20</u>
USPT	antibod\$3 with l18	35	<u>L19</u>
USPT	l17 with (fusion adj (protein\$1 or peptide\$1 or polypeptide\$1 or conjugat\$2)	176	<u>L18</u>
USPT	chemokine or (interleukin adj 8) or (il-8) or il8 or (MIP\$2) or MIP or (macrophage inflammatory protein\$1) or (MCP\$2) or mcp or (macrophage adj chemoattractant) or pl4 or (platelet near factor near 4) or rantes or (beta near thromboglobulin) or (b near thromboglobulin)	10816	<u>L17</u>
USPT	l15 and @ad<19990222	71	<u>L16</u>
USPT	l14 with treatment	76	<u>L15</u>
USPT	l13 with antibod\$3	3720	<u>L14</u>
USPT	(conjugate\$1 or fusion) near (protein or peptide or polypeptide or lymphokine\$1 or cytokine\$1 or chemokine\$1)	13629	<u>L13</u>
USPT	l10 or l11	147	<u>L12</u>
USPT	l1 with biotin	87	<u>L11</u>
USPT	l1 with biotinyl\$5	94	<u>L10</u>
USPT	l3 same (half adj life)	0	<u>L9</u>
USPT	l2 with (bound adj to)	0	<u>L8</u>
USPT	l1 same (biotin\$5 with (anti-biotin))	2	<u>L7</u>
USPT	treatment with l3	1	<u>L6</u>
USPT	l3 and anti-biotin	2	<u>L5</u>
USPT	l3 and @ad<19990222	165	<u>L4</u>
USPT	l2 with complex\$2	174	<u>L3</u>
USPT	antibod\$3 with l1	3861	<u>L2</u>
USPT	fusion adj protein\$1	11369	<u>L1</u>

L15 ANSWER 1 OF 3 MEDLINE
ACCESSION NUMBER: 94081675 MEDLINE
DOCUMENT NUMBER: 94081675
TITLE: Separation of rare cell subpopulations with the aid of biotin-labelled ligands.
AUTHOR: Steinitz M; Livoff A; Tamir S; Brenner T
CORPORATE SOURCE: Department of Pathology, Hebrew University-Hadassah Medical School, Jerusalem, Israel..
SOURCE: MEDICAL ONCOLOGY AND TUMOR PHARMACOTHERAPY, (1993) 10 (1-2) 49-52.
PUB. COUNTRY: Journal code: LSP. ISSN: 0736-0118.
ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199403
AB A universal method for selection of surface marker-positive cells is described. The cells, admixed with an excess of surface marker-negative cells, are first labelled with a specific **biotinylated ligand** and then isolated with the aid of monoclonal, **anti-biotin** coated beads. The method enables selection and isolation of cells with a frequency as low as 10^{-4} . The ligand can be an antigen (for selection of infrequent antibody-producing cells), an antibody (for selection of surface antigen-positive cells) or other molecules (for selection of specific receptor-positive cells).